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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/640,126	08/16/00	DIEKHANS	N 3869/59156-0

EXAMINER	
PETRAVICK, M	
ART UNIT	**PAPER NUMBER**
3671	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/640,126	DIEKHANS, NORBERT	
	Examiner	Art Unit	
	Meredith C Petravick	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 15 recites the limitation "means for restricting the possible adjustment ranges by predetermined limiting values." However, no examples of the type of means used or a description of the means is given in the specification. They specification only states that provisions are made to prevent the adjustment of the sieve beyond limiting values (page 7, line 23-28). Since it is not obvious to one of ordinary skill in the art what the means would be and the specification does not provide a description, the specification would not enable one skilled in the art to make the invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 15 contains the limitation "means for restricting the possible adjustment ranges by predetermined limiting values." However, the specification fails to provide examples or a

description for the above means. Therefore, the claim is unclear since the equivalents of the means can not be determined from the limitation.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-2, 4-6, 8-12, 13 and 16-17 rejected under 35 U.S.C. 102(e) as being anticipated by Watt et al. 5,995,895 (Watt).

Watt discloses the claimed device on a combine harvester including a cleaning mechanism (46):

- sieves (48, 52)
- an adjustable fan (50)
- a member for adjusting the opening widths of the sieve (36)
- a sensor (80)

The sensor delivers a measuring signal to the member for adjusting the sieve and the rotation speed of the fan. (column 14, lines 14-22 and 31-38) The signal is dependent on the loading of the combine harvester but independent of the setting of the cleaning mechanism. A controller then sends a signal to adjust the widths of the sieve.

In regards to claims 4-6, the sensor receives a signal that measures the anticipated moisture content of the straw (column 11, lines 10-11), the amount of crop harvested (column 7, lines 29-34), or the ground speed of the combine harvester (column 10, lines 39-44).

In regards to claims 8-10, the harvester uses tables to determine the desired setting. (column 10, lines 61-65)

In regards to claim 12, the harvester includes means for altering the programmed function and the stored dependencies (100).

In regards to claim 13, the harvester has more than one sieve.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Kruse et al. 4,487,002 (Kruse).

Watt discloses the claimed device except for the sensor detecting the amount of straw in the feeder housing of the combine harvester.

Like Watt, Kruse discloses an automated combine harvester, which detects the load of the crop in the harvester. Kruse teaches a sensor on the feeder to determine the amount of material entering the harvester. (Column7, lines 31-34)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the sensor of Watt a sensor which measures the amount of straw entering the

harvester from the feeder as in Kruse, as an alternate type of sensor which determines the load of the material in the harvester.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Herlitzius et al. 5,775,072 (Herlitzius), cited by applicant.

Watt discloses the claimed invention except for making the setting of the opening width of the sieve device dependent on the rotational speed of the fan.

Like Watt, Herlitzius also discloses a control system for a combine harvester with an adjustable sieve and fan. Herlitzius teaches that in order to optimally clean the grain the sieve openings have to be optimally arranged in dependence on the rotational speed of the fan. (column 3, lines 16-26)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to control the sieve opening in dependent relation to the fan speed as taught in Herlitzius, in order to optimize the cleaning of the grain.

6. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt.

Watt discloses the claimed device except for having four independently controlled sieves instead of two. The number of sieves that are independently controlled is an obvious design choice. Since the invention is a control system that on a combine harvester, it would be well within the ordinary skill of one in the art to control any number of sieves that happened to be on a type of harvester with the control system.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Hofer 6,117,006.

Watt discloses the claimed device except means for restricting the possible adjustment ranges by predetermined limiting values.

Like Watt, Hofer discloses an adjustable sieve. The sieve is adjustable within a finite range. This prevents the sieve from being fully closed or fully open.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the adjusting sieve of Watt with a means for restricting the possible adjustment ranges of the sieve openings as taught in Hofer, in order to prevent the sieve from being fully closed or fully open.

Response to Arguments

8. Applicant's arguments filed 4/30/01 have been fully considered but they are not persuasive.

In the amendment filed 4/30/01, applicant amended claims 1, 3, 16 and17, which were rejected under 35 U.S.C 112, 2nd paragraph. Applicant has over come the rejection of claim 1, 3, 16 and 17 under 35 U.S.C 112. Also, applicant argues the rejection of claim 15 under 35 U.S.C. 112 and the rejection of claims 1-17 under 35 U.S.C. 102(b) or 35 U.S.C. 103(a).

Claim 15 was rejected under 35 U.S.C. 112 because the limitation "means for restricting the possible adjustment ranges by predetermined limiting values" was not enabled in the specification.

In response to this rejection, applicant argues the graphs or tables used to determine the amount of movement of the sieve can also be used to restrict the range of the limits. However,

the specification fails to disclose that the table and graphs are used to limit the range of movement of the sieve. The specification does not state whether the last entries in the table or graph are the limits of movement or whether some other numbers on the table or graph are the limit. In fact, the specification does it state that the movement of the sieve is limited. Therefore, claim 15 remains rejected.

Claims 1-2, 4-6, 8-12, 13, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Watt.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a load sensor) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Contrary to applicant's argument, the limitation "at least one **sensor whose measuring signal is dependent on the loading** to which the combine harvester is subjected by the crop but which is independent of the setting of the cleaning mechanism" does not limit the invention to only a sensor which directly measures the load as argued by applicant. The limitation recites a sensor whose measuring signal is dependent on the loading. Watt discloses a sensor (80) that gives a signal to the sieves. The signal is dependent on the loading of the harvester at a specific location. A GPS system inputs a location and the sensor derives the load at that location and then sends a signal to adjust the sieves. Therefore, Watt discloses the invention as claimed in claims 1, 16, and 17.

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Kruse.

Applicant argues that Kruse does not disclose a sensor measuring the amount of straw. Kruse states, "An indication of the material flow through the feeder indicated that at some future time similar flow could be expected at the threshing mechanism." (Column 7, lines 31-34) Here Kruse teaches the use of a sensor to indicate the amount of material so that the amount of material in the threshing mechanism could be determined. This teaching can be applied to any material including straw. Therefore, claim 3 remains rejected.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watt in view of Herlitzius.

Applicant argues that Herlitzius does not disclose changing the size of the sieve opening in dependence with the fan speed. As applicant point of Column 3, line 16-44 states, "In order to attain this optimum **operation a certain relationship must be maintained between the mechanical processing of the crop, the width of the sieve opening, and the blower output.**" Contrary to applicant's arguments this statement clearly discloses a relationship between the sieve openings and the blower output. Therefore, claim 7 remains rejected.

Therefore, for at least the reason's given above, claims 1-17 remain rejected under 35 U.S.C. 112 and/or 102(e) and/or 103(a).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meredith Petravick whose telephone number is 703-305-0047. The examiner can normally be reached on Monday-Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-305-3597.

Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

MCP
July 9, 2001